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"Resolving the Digital Divide: Information, Access and Opportunity"
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"Challenges And Solutions to Access for All"

Tomas Rivera Policy Institute (TRPI)

The Tomas Rivera Policy Institute conducts research on public policy issues that impact the Latino community. TRPI's interest in information technology began in 1986 with a study focussed on the impact of the early use of computers in classrooms with large numbers of Latino students. Since then, TRPI has conducted ten (10) studies on a wide range of IT topics, the latest ones providing insights into the use of the Internet in Latino as well as a broader range of low-income communities. In addition, TRPI has also produced several reports on media and communications themes, such as Latinos and TV viewing and Latinos and Hollywood. In 1997, IT became the signature research area of TRPI. See www.trpi.org.

Latinos and the Digital Divide

The findings:

- 12.9% of Hispanic households are connected to the Internet, compared to 32.4% for White, non-Hispanic households. [NTIA, 1999]
- 43% of Latino households have Internet access at home, compared to 44% for White, non-Hispanic households. (Forrester Research, 1999)
- 15% of Latino households have Internet access compared to 23% of White, non-Hispanic households. [TRPI, 1998]
- Between 1993 and 1998 there was a dramatic increase in Hispanic home computer ownership. [TRPI, 1998]
- In 1994, less than 2% of Hispanic computer owners were connected to the Internet. By 1998, 15% subscribed to Internet services. [TRPI 1998]
- Obstacles to buying a computer among Hispanics: outdated equipment, what brand to buy, difficult to operate, too expensive.
- Computer ownership and Internet use differs across income levels within the Latino communities.
- While half (50%) of Latino-owned businesses in Southern California have websites, it is unclear about e-commerce, only 1 in 3 feels there are some e-sales.
- 74.5% of Latino homes receive cable or satellite television service.

- 84.7% of Latino homes have VCRs.
- Hispanic population (% of total U.S.). 31,469,000 (11.5%) Median age: 28.8; % under 18: 35.7%
- Largest concentrations in 5 states: CA, NY, IL, FL, and TX

The dilemma:

- Latinos in inner cities with low overall connectivity, and lesser public access.
- Latinos in lower economic levels and the challenge of affordability.
- Need for culturally and linguistically friendly classrooms, libraries, and Internet content.
- Perception among parents about children's Internet access to pornography and focus on games, rather than educational online activities.
- Need for broad education about the merits of connectivity and "how to buy a computer."
- Latinos are not all alike, even with respect to computer penetration and Internet use, there is variations across various Latino groups.
- Most Latinos do not have access to computers and Internet at home, or at work.

Latinos and Media and Communications

- Television: *Talking back to Television* and *Engaging Television in English en Espanol*. One of the biggest concerns shown in the research is that Latinos are largely absent from TV programs and commercials. Three out of 4 Latinos said they watch as much English-language TV as Spanish-language TV. The most widely watched Spanish-language program is the news.
- Movies: *Missing in Action: Latinos In and Out of Hollywood*. Latinos are more likely to see films that feature Latino actors. While U.S.-born Latinos are avid consumers of movies, foreign-born Latinos are less likely to see films at theatres, representing an opportunity for the movie industry to expand its audience.

The Digital Steppingstones Project: Challenges to Bridging the Digital Divide

The Digital Steppingstones Project (DSS) is a three year effort sponsored by the W.K. Kellogg Foundation aimed at identifying successful practices in enhancing access to and the benefits of information technology to low-income communities. Working with policy makers, practitioners, community leaders as well as users, the DSS project hopes to ascertain how public access points (schools, libraries and community-based organizations) can be better utilized to "bridge the digital divide." Please visit: www.trpi.org/dss

In the last 2 years, the Project has discussed this issue with over 200 stakeholders and they have identified some common challenges to building more and better public access points, among them:

- **Equal Access.** Policy makers, program staff, parents, community leaders, students, library patrons, and the private sector must be committed to making information technologies equally accessible to all.
- **Recognizing IT as a tool.** Information technology is a tool for addressing needs, rather than an end in and of itself. These tools are best used to serve local community needs, such as improving student learning, job training, and providing convenient health and citizenship education.
- **Need for user literacy.** Merely having computers and other technologies available is not sufficient. Study participants emphasized that people need to know how to use them effectively. Basic literacy skills such as reading, writing, math, critical thinking and technology skills are all necessary in order for users to fully benefit from the use technology in schools, libraries and community centers.

- **Infrastructure barriers.** Information technology infrastructures vary across and within communities and public access points. Researchers found that small and older facilities, the absence of appropriate technology policies, the lack of equipment and software, and inadequate human technical capacity remain major obstacles. Although communities acknowledge the assistance from the private sector, they also mentioned the need for longer-term support.
- **Program sustainability.** Establishing appropriate programs with equal access is a first step, but it is not enough. Program leaders must develop strategies to sustain programs, by addressing ongoing funding requirements, by keeping pace with technology changes, and by ensuring adequate technology capacity. Program leaders mentioned that efforts often fail when they are based on one person's vision.
- **Staff capacity.** Another critical ingredient for a successful program is adequate staff capacity. Programs need to attract, develop and retain teachers, librarians and program staff who value technology use and have experience using IT. In many disadvantaged communities, the cost of hiring, training and retaining qualified staff is more difficult.
- **Parent and community buy-in.** Parents and community members can play a strong role in program advocacy. However, TRPI also learned that many parents worry that their children have easy access to pornography and violence on-line. Many are concerned that children spend more time playing computer games than engaging in educational activities. However, overall trust and support for technology presence is growing.
- **The impact of IT access and use must be evaluated.** Although TRPI learned that participants agreed on the need for meaningful evaluation, they were also keenly aware of the difficulty in developing those tools. Participants raised more questions than answers about how effective technology can be used for educational purposes. Merely counting the number and identifying the interest levels of people who use computers is no longer considered an adequate way to determine whether education, life and work skills actually have been developed.
- **Schools, libraries and community centers represent three primary, but distinct public access points.** These three access points are similar in many ways, however, each has unique features. For instance, schools can reach K-12 students almost every day. Libraries and community centers can serve a broader range of age and ethnic groups, and adjust hours of access more easily than schools can.

Status of IT in Libraries and Schools: The Digital Divide

- There are 15,994 library branches nationwide. [Bertot and McClure, 1998]
 - Public libraries are the number one point of online access for people without Internet connections at home, schools or work.
 - 26.7% of all public library outlets do not provide public access to the Internet.
 - Nearly 2/3 of connected libraries offer only 1-2 public access computer workstations.
 - More than 47% of libraries service areas identified as having a poverty level about 20% have no public Internet access.
 - 51.5% of libraries are in rural areas, but provide a lower rate of access than urban and suburban outlets.

- In 1998, 89% of schools were Internet connected, with the goal of 100% connectivity by 2000. [NCES 1999]
 - 51% of classrooms had internet access in 1998, up from 27% in 1997.
 - In 1997, classrooms in affluent schools and in schools with a low minority enrollment were more likely to have Internet connectivity.
 - A disparity exists in access and levels and types of connectivity between the very poorest schools and all other schools.
 - Research shows the highest achieving students attend schools with good library media centers. [ALA, 1999]

Observations and Recommendations

- Develop guidelines for appropriate research and evaluation methods for studying the impact of information technologies on society (individuals, homes, communities, classrooms, etc.) in order to enhance policy debate and decision making, and address the claims of skeptics.
- Facilitate the development of a network of academics, community members and policy makers to jointly frame and guide a research agenda and to identify a set of good and feasible data tracking systems.
- Consider appropriate funding mechanisms for community-based organizations to support their role in preparing local communities and their members for the information age.
- Identify appropriate "digital" credentials for teachers, librarians and community organization staff in order to enhance the viability of public access points to bring IT and its use to all communities.
- Support federal, state and local funding initiatives that provide a stimulus to enhance access and use of IT: E-rate, TIAAP grants, Technology Literacy and Innovation Challenge grants, Library Service and Technology funds -- with an eye to building RFPs in order to seek proposals from those organizations and communities that remain unconnected and unable to compete for traditional funding.
- Implement leadership initiatives to develop a new paradigm in education that incorporates information technology as part of a new literacy standard.
- Begin to understand the future possibilities of inter-connected public access points serving the same low-income community and seek models to support.
- Build local leadership in order to develop and sustain progress. Besides community leaders and parents, ensure that municipal officials are informed and responsive to local needs for IT infusion and use.
- Identify appropriate reward strategies for teachers, librarians and community center staff who are not only successful in providing IT training, but who remain in force.
- Work with the private sector to delineate the roles that companies will play -- beyond the initial launch stage of projects -- to support sustainability.
- Continue the vigil to get connectivity in homes.

- **Keep a continuous watch to determine what communities continue to be left out -- and build policies, secure funding, and amass advocacy for building those bridges.**

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